

# Dynamic Engineers Inc.

2550 Gray Falls Dr., Suite#128, Houston, TX, 77077 USA TEL: 1-281-870-8822 EMAIL: Sales@DynamicEng.com **D@% % 6 E !GG!('' A < n!((' A < n!5**I HH-I I HMHz SMD PLL Synthesizer

#### **Features and Benefits**

Frequency Range:433-443MHz Supply Voltage:5.0V

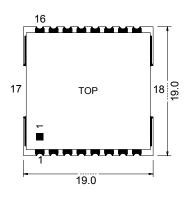
Current: 25mA Max.
3 wire serial integer PLL
Output power: +5.0dBm Max.
Phase noise: -109dBc/Hz@10KHz
Operating temperature: -40°C--+85°C

Size:19x19x5.8mm Package type: SMD

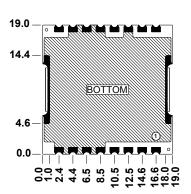
#### **Typical Applications**

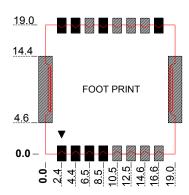
Base station
Cable TV
Satellite Communications
UHF radio link

# **Mechanical Drawing & Pin Connections**









### **Drawing No:**

MD2400+&-1

#### Pin Connections:

Pin	Function			
1	CLK			
2	DATA			
3	LE			
4	Ref. IN			
5-8	GND			
9	VCC(VCO)			
10-12	GND			
13	RF Out			
14	GND			
15	Vcp(PLL)			
16	Lock Detect			
17&18	GND			

Unit in mm 1mm = 0.0394 inches



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## **Specifications**

Para	meter	Units	Min.	Typical	Max.
Operating Frequency Range		MHz	433		443
Output Power		dBm	+1.0	+3.0	+5.0
Step Size		KHz		10	
Settling Time		msec		10	30
Output Impedance		Ω		50	
Phase Noise	@1kHz offset	dBc / Hz		-86	-81
Phase Noise	@10kHz offset	dBc / Hz		-109	-104
Phase Noise	@100kHz offset	dBc / Hz		-130	-125
Phase Noise	@1MHz offset	dBc / Hz		-150	-145
2nd Harmonic Suppression		dBc		-28	-20
Sideband Spurious Suppression		dBc			-75
Reference (input frequency)		MHz	5		100
Reference (input level)		dBm	-5		+5
VCO Power Supply (Vcc) Voltage		Vdc		5	
VCO Power Supply (Vcc) Current		mA		14	25
PLL Power Supply (Vcp) Voltage		Vdc		5	
PLL Power Supply (Vcp) Current		mA		5	10
Operating Temperature Range		°C	-40		+85